Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A bioprocessing system, comprising:
- (a) at least one bioreactor, wherein each bioreactor comprises a well housed in a multiple-well plate;
- (b) at least two optical chemical sensors associated with each bioreactor, wherein the optical chemical sensors are located within each bioreactor;
- (c) at least one excitation source corresponding to each optical chemical sensor; and
 - (d) at least one detector.
 - 2. (Canceled).
- 3. (Currently Amended) The bioprocessing system of elaim 2claim 1, wherein the optical chemical sensors are sensor patches positioned at the bottom of the well.

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- 4. (Original) The bioprocessing system of claim 1, wherein each bioreactor is a cuvette.
- 5. (Original) The bioprocessing system of claim 4, wherein the optical chemical sensors are sensor patches affixed to at least one wall of the cuvette.
- 6. (Original) The bioprocessing system of claim 1, wherein each bioreactor is a culture vial housed within a receptacle of a multi-receptacle bioreactor platform.
- 7. (Original) The bioprocessing system of claim 6, wherein the optical chemical sensors are sensor patches positioned at the bottom of the culture vial.
- 8. (Original) The bioprocessing system of claim 7, wherein the excitation source is a light emitting diode.
- 9. The bioprocessing system of claim 8, wherein the detector is an integrated spectrometer and diode array.
- 10. (Original) The bioprocessing system of claim 1, further comprising a bioreactor platform containing at least one receptacle to house each bioreactor.

11. (Original) The bioprocessing system of claim 10, further comprising a sub-

platform, wherein the bioreactor platform is positioned on top of the sub-platform.

12. (Original) The bioprocessing system of claim 11, further comprising an agitator,

wherein the sub-platform is positioned on top of the agitator.

13. (Original) The bioprocessing system of claim 12, further comprising a positioning

table, wherein the positioning table is positioned below the agitator such that the positioning

table is capable of moving the bioreactor in an x-y or x-y-z plane to a predetermined position.

14. (Original) The bioprocessing system of claim 1 or 13, further comprising a data

acquisition and control system connected to components of the bioprocessing system via cabling

means.

15. (New) A bioprocessing system, comprising:

at least one bioreactor, wherein each bioreactor comprises a cuvette;

at least two optical chemical sensors associated with each bioreactor, wherein the

optical chemical sensors are located within each bioreactor;

at least one excitation source corresponding to each optical chemical sensor; and

at least one detector.

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16. (New) A bioprocessing system, comprising:

at least one bioreactor, wherein each bioreactor comprises a culture vial housed within a receptacle of a multi-receptacle bioreactor platform;

at least two optical chemical sensors associated with each bioreactor, wherein the optical chemical sensors are located within each bioreactor;

at least one excitation source corresponding to each optical chemical sensor; and at least one detector.

17. (New) A bioprocessing system, comprising:

a bioreactor platform comprising at least one receptacle for housing a bioreactor; at least one bioreactor positioned in a respective receptacle of the bioreactor platform;

at least two optical chemical sensors associated with each bioreactor, wherein the optical chemical sensors are located within each bioreactor;

at least one excitation source corresponding to each optical chemical sensor; and at least one detector.

18. (New) A bioprocessing system, comprising:

at least one bioreactor;

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at least two optical chemical sensors associated with each bioreactor, wherein the optical chemical sensors are located within each bioreactor;

at least one excitation source corresponding to each optical chemical sensor; at least one detector; and

at least one dispenser positioned to selectively dispense a predetermined substance into the bioreactor.

- 19. (New) The bioprocessing system of claim 18, wherein the dispenser comprises a liquid dispenser.
- 20. (New) The bioprocessing system of claim 18, wherein the dispenser comprises a gas dispenser.
- 21. (New) The bioprocessing system of claim 18, wherein the predetermined substance comprises an acid, a base or a nutrient.